the original cleavage or weathering planes parallel to certain sides of the fragment, which clearly indicated their mode of formation. Similar fragments occur in almost every portion of the country, their shape varying with the material of which they are formed. Professor Haynes himself states in the paper referred to, "Wherever it has been in my power to make the long and laborious search that is required, I have succeeded in finding them," etc. It is readily understood how a skilled archæologist, accustomed to find a use for every rude implement, would naturally find design also in the close imitations made by Nature.

Among these objects of natural origin there were also a very few which bore traces of human handiwork, some of these being apparently "skin-scrapers." These latter often occur with the most highly finished Indian arrow-heads, and offer, therefore, no evidence of high antiquity. The cases where the same Indian tribe has manufactured implements of the finest workmanship at the same time with those of rudest make, each being intended for different uses, are so numerous as to need only to be mentioned.[1]

Returning finally to the supposed implement from the Philadelphia gravel, now brought before the attention of the Academy, Professor Lewis stated that he did not desire to urge any one interpretation of it, but merely to offer some particulars which might not otherwise see the light, and to show their meaning if verified hereafter. Whatever value might be attached to the circumstances of the discovery of this specimen or to its apparent artificial origin, it would at least serve to stimulate a further search for evidences of man in the gravels underlying the city.

An implement found in a thickly populated district, more especially as it occurred in a shifting water gravel, would always be open to suspicion, and at all events a single specimen is not sufficient upon which to base the broad conclusions which would otherwise be warranted.

Note on a Drilled Mall in the Haldeman Collection of Antiquities.—Mr. H. T. Cresson called attention to a large drilled mall or hammer-head of stone, from the Haldeman collection of antiquities. It was found at Peach Bottom, Lancaster County, Pennsylvania, in 1866, and weighs eight and three-quarter pounds. Most pre-historic hammer-heads or stone malls, consist of oval pebbles, small boulders of quartzite, granite, or other hard materials, which show modification by the hand of man, and have generally undergone more or less of pecking and polishing to bring them into a required shape. The mall exhibited did not possess any groove, but had a drilled hole for the insertion of a haft, which

[1] At a meeting of the Academy held a week ago, Mr. Aubrey H. Smith presented two Indian implements picked up by himself on the shores of the Loyalsock Creek, Lycoming Co., Pa., where they lay side by side. One was a rudely chipped implement like those of the Trenton gravel, while the other was a delicately formed arrow-point.

is of rare occurrence in any form of axes or hammers belonging to our American Indians, except in the case of ceremonial weapons. The length of the haft-hole in this mall is four and a half inches; but its width of one inch, which in the drilling from either end toward the centre, narrows to half an inch, does not seem to be sufficient in comparison with its size to warrant the insertion of a handle; for this reason the speaker was inclined to believe that it was in an unfinished condition. Malls have been found in the ancient copper mines at Keeweenaw Point and Isle Royal in Lake Superior without grooves for hafting, and occasionally with double grooves. There are malls in use at present among the Sioux Indians for breaking bones and pounding pemmican, but these are firmly encased in raw hide, except that portion of the head used in striking. The occurrence of this kind of haft-hole, excepting as before stated in the ceremonial weapons, is not often seen, resembling in this respect some of the neolithic malls and hammers of the eastern continent.

February 13.

The President, Dr. Leidy, in the chair.

Thirty-three persons present.

The following papers were presented for publication :—

"A new Unio from Florida," by Berlin H. Wright.

"Notes on the Birds of Westmoreland Co., Penna.," by Chas. H. Townsend.

The Publication Committee reported in favor of publishing the following papers in the Journal of the Academy :—

"Urnatella gracilis," by Jos. Leidy, M. D.

"On the Extinct Peccaries of North America," by Jos. Leidy, M. D.

"The Terrestrial Mollusca inhabiting the Society Islands," by Andrew Garrett.

Change of Color in a Katydid.—Professor Lewis recorded a curious instance of modification in color in the case of a katydid, where the normal light green tint had been replaced by a bright scarlet, the complementary color. The insect, which was found at Point Pleasant, N. J., differs in no way from the common katydid, *Cyrtophyllum concavum* Say, except in the unusual color.

On the Reproduction and Parasites of Anodonta fluviatilis.—Prof. Leidy directed attention to a basketful of living fresh-water mussels, *Anodonta fluviatilis*, which were obtained for him through the kindness of Rev. Jesse Y. Burke, and are now placed at the